

Remarks

Claims 1 to 20 were rejected under 35 U.S.C. 103(a) as obvious over Burdine et al. ("Burdine") in view of O'Neill and Hermann. Applicant includes herewith a Declaration under 37 CFR 1.131 by the inventor, Luca D'Ottone, with an attached exhibit that shows that Applicant made his invention at least as early as November 8, 2001, about 2 months prior to his filing date and prior to the filing date of Burdine, which is December 5 2001. This Declaration effectively swears back of the Burdine patent and removes it as a reference.

With Burdine removed as a reference, the rejection over Burdine in view of O'Neil and Hermann is believed to be overcome. O'Neil was extensively discussed by Applicant in his previous amendment, filed May 4, 2005, and Applicant will not repeat those remarks here.

Hermann, another new reference, was cited to show "the destruction of CBW agents with the application of a plasma jet to vapor solutions such as hydrogen peroxide and/or water to create free radicals and that densities of  $10^{16}$  molecules/cc are achieved." Herman uses an atmospheric pressure plasma jet (APPJ) to create "free radicals." Hermann states in his Abstract that "the fast-flowing effluent still contains" radicals such as hydroxyl (OH). However, nowhere in Hermann is the density of hydroxyl free radicals given. In Table III on page 2288 of Hermann, the typical density of species generated by APPJ is given, but there is no data in that table or elsewhere in Hermann that gives the density of the hydroxyl free radicals that are generated.

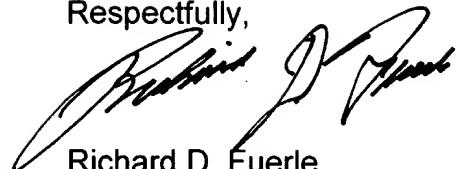
Moreover, Applicant's Claim 1 requires the concentration of hydroxyl free radicals to be at least about  $10^{16}$  molecules/cc for "at least one minute." Nowhere in Hermann is there any indication that hydroxyl free radicals at any density, let alone at that density, are generated for at least one minute.

Hermann also does not disclose a pump for pumping gas out of the enclosure nor does he disclose detoxifying the gas pumped out, both of which are required in all of Applicant's claims.

Hermann uses APPJ to generate the hydroxyl radicals. There is no suggestion or discussion in Hermann of using ultraviolet light to generate hydroxyl radicals. Moreover, Hermann feeds a mixture of oxygen and helium into his APPJ. The products of the APPJ treatment of that feed include ozone and hydroxyl radicals. There is no suggestion in Hermann to use ozone itself as a feed. Applicant's Claims 2 to 4, 11, 13, and 15 to 18 require using a hydrogen donor (e.g., hydrogen) and ozone as a feed to a UV light. Applicant's Claims 5, 12, 19, and 20 require the use of hydrogen and nitrogen dioxide gas as a feed to a UV light, which is even further removed from the disclosure of Hermann.

All of the claims are now believed to be allowable over the references cited and reconsideration and allowance of all of the claims are therefore requested. The Examiner is invited to call Applicant's attorney at (716) 774-0091 to resolve any remaining problems.

Respectfully,



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